

CITY OF SPRINGFIELD  
INTER-OFFICE MEMORANDUM

ATTENTION OF \_\_\_\_\_ FILE \_\_\_\_\_

DATE January 20, 1982 \_\_\_\_\_

DEPARTMENT \_\_\_\_\_

On 1-19-82 at approximately 10:30 A.M. we received a call from the Fire Department dispatcher informing us that Midwest Walnut at 1700 E. Atlantic had gasoline odors coming through a sewer drain. We met Fire Marshalls Mann and Gourley and were informed that they measured 60% of the Lower Explosive Limit at Midwest Walnut. We measured 100% of the Lower Explosive Limit in manholes number 4 and number 13 of Wye Map J-13. We called for the sewer flusher and began flushing several sections of line to help in pinpointing the section of line which intrusion of gasoline could be observed and to locate a possible source.

Our inspections revealed that the section of line affected is between manholes number 10 and number 11 of Wye Map J-13. This section of line appears to serve only "We Pump" service station at 2027 N. Glenstone.

"We Pump" station personnel were contacted about the problem and they informed us that Morris Oil Company, 500 N. National, operates the station. An employee at the station called Morris Oil and indicated that they would have Stoddard Equipment Company check their lines and storage tanks for gasoline leaks.

We will continue to monitor the sewers in the neighborhood and if a serious safety problem should develop, we could plug the section of sewer line between manholes number 10 and 11, Wye Map J-13.

*500 N. NATIONAL*

SIGNED \_\_\_\_\_ S.D.S. and J.R.L. \_\_\_\_\_

*SDS*

*JR2 2027 N. Glenstone*

Rosh Jenkins, Manager

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June 25, 1982

When this office first had suspicion that the We-Pump Service Station could be the cause of the problem, the Morris Gas and Oil Company was enlisted in locating the problem source. Inventory records indicated no significant loss of product. During subsequent testing, Stoddard Equipment Company did discover a loss of integrity in one product pumping system. During excavation of the pumping system this office did observe the loss of product into the surrounding subsurface soils.

The observed volume of loss was relatively small, but the length of time this problem was manifest is unknown.

This office did collect, segregate, and dispose of approximately 200 gallons of product. Morris Oil was contacted to determine if the company wanted the product or if the City was to dispose of the collected liquid. Before disposal, each drum of product was checked to determine the quantity of product. This was done to comply with Southwest Oil Company's requirements.

During the project, personnel from this office were in contact with Morris Oil Company, updating pertinent information.

This office offers the following explanations for the questions contained in your letter of June 17, 1982.

1. "...The loss of product from our location was so small that the daily stick readings did not reflect a shortage."

The Water Pollution Control Section can only assume, if tank stick readings are to be considered a true and accurate record of inventory, the product loss was a slight leak that over an unknown period of time resulted in a significant amount of product entrapped in the surrounding soil.

2. "The leak was repaired immediately, yet we are being billed for costs incurred spanning nearly a month including 42 man hours with 3 men at the site each time."

This office monitored each pumping incident to determine the volume of product collected. Only when the plug could be removed with the expectation of acceptable vapor conditions resulting did the isolation and pumping cease. Termination prior to this time would endanger the life and property of the neighborhood.

Three men were present at each pumping incident by design. A long standing safety rule for City personnel entering sanitary sewer manholes require at least two persons above ground to retrieve a third from a manhole. When personnel entered the sewer manhole they were equipped with self-contained breathing apparatus and safety harness with lanyard secured above ground. Three men were required to perform the pumping routine. One person monitored

2027 N. Glenstone

Rosh Jenkins, Manager  
Page 3  
June 25, 1982

an air compressor and pumping volume while two people filled and decanted water from 55 gallon drums. A crew of less than three persons would have compromised the safety and efficiency of the operation.

3. "We were also informed that the bladder installed in the sewer to stop the flow of gasoline was inadvertently deflated adding yet more cost to the bill."

During one of the early pumping exercises the plug was inadvertently deflated, and did result in the loss of a significant amount of product. This discharge resulted in several downstream gasoline odor complaints and a building by building inspection in a four block area. You will note that only costs involved in the actual pumping exercises were forwarded to your company. There were many man hours of investigation and monitoring that did not appear on the cost sheet.

4. "We have had spills and leaks in the past, but have never been billed for any sort of clean-up. It is hard to see how such a small leak for so short a time could tie up this amount of equipment and personnel for so long a time."

The City of Springfield has billed responsible parties for costs involved in correcting dangerous situations in the sewer for several years. This policy was necessitated by the increasing number and severity of unplanned discharges into the sanitary sewer. As a matter of policy, it was unfair to expect all customers to subsidize the costs involved for one patron's accidental discharge.

With this letter we are enclosing a copy of John O. Osgood's paper "Hydrocarbon Dispersion in Ground Water: Significance and Characteristics." This presents a relatively good overview of the subject which you may wish to review.

While this office does not like to forward charges for work performed, in this case we feel it unfair to absorb the total costs involved. The situation had the potential for great personal and property damage as well as the liability that would follow such an incident.

Do not hesitate to contact this office if you have any further questions.

Yours truly,

Henry M. Cole, P.E.  
Sanitary Engineer

HMC:js

cc: Robert R. Schaefer, P.E., Superintendent of Sanitary Services

2027 N. Glenstone

June 25, 1982

Rosh Jenkins, Manager  
Morris Oil Co., Inc.  
500 North National  
Springfield, Missouri 65802

Re: We-Pump Service Station

Dear Mr. Jenkins:

This letter will answer your questions concerning the costs and procedures involved in the collection and removal of gasoline from the sanitary sewer serving your property at 2027 North Glenstone.

On January 19, 1982, the Water Pollution Control Section was advised by the Springfield Fire Department of flammable vapors in the 1700 block East Atlantic. Springfield Fire Marshalls measured 60% of the Lower Explosive Limit (L.E.L.) in the building and advised the occupants to ventilate the building.

The ensuing investigation, using visual observations and combustible gas detectors, traced the apparent source to a 450 foot section of sanitary line serving the We-Pump Service Station. The We-Pump is the only property attached to that section of sewer main. During the investigation combustible gas levels were consistently at 100% of the L.E.L. At 100% of the L.E.L. all that is needed for an explosion is a source of ignition.

During the investigation Sewer Maintenance crews, using a high pressure flusher, were unable to lower the vapor concentration.

To minimize the potential danger to City property, as well as several square blocks of non-residential and residential neighborhoods, the problem area was isolated. Before the isolation was completed, this office received complaints of gasoline odors in homes as far away as the 1600 block East Division.

The problem area of sanitary sewer was plugged using an inflatable bladder. The bladder is equipped with a pumping port to evacuate contained liquids. This allows for the contained liquids to be decanted, resulting in the retention of hydrocarbons.

The frequency of pumping was determined by monitoring the amount of recovered product.

2027 N. Glenstone

869-7333

pd. PHONE  
PER PHONE  
CONVERSION  
WITH CHARLENE

March 9, 1982

Rosh Jenkins  
Morris Gas and Oil Company  
500 North National  
Springfield, Missouri 65802

Re: We-Pump Service Station  
2027 North Glenstone

Dear Mr. Jenkins:

This letter and enclosures will advise you that the following expenses were incurred in the collection of gasoline entering the Springfield Sanitary Sewer System. The expenses are hereby certified and forwarded to Morris Oil Company for payment, per Springfield City Code, Chapter 30-18. Enclosed is a detailed explanation of the personnel and equipment costs involved. Payment should be made to the Director of Finance, City of Springfield, and should be sent to:

Mr. Robert R. Schaefer  
Superintendent of Sanitary Services  
Room 210, City Hall  
830 Boonville  
Springfield, Missouri 65802

The totals from the detailed enclosures are as follows:

Personnel	\$599.64
Equipment	\$349.00
Total	<u>\$948.64</u>

If we can be of any assistance or can answer any questions, please do not hesitate to call 864-1924.

Yours truly,

Henry M. Cole  
Sanitary Engineer

HMC:js

cc: Robert R. Schaefer, Superintendent of Sanitary Services  
Fred Fantauzzi, Director of Finance  
File

2027 N. Glenstone

Rosh Jenkins  
 Morris Gas and Oil Company  
 March 9, 1982

EQUIPMENT

<u>Number</u>	<u>Hours</u>	<u>Rate</u>	<u>Charge</u>
February 9, 1982			
Utility Vehicle P2-24	8 miles	.35	2.80
Dump Truck T2-47	3	23.00	69.00
2" Pump NP-302	2	2.00	4.00
Air Compressor	Rented		<u>25.00</u>
			100.80
February 24, 1982			
Utility Vehicle P2-24	8 miles	.35	2.80
Dump Truck T2-47	3	23.00	69.00
2" Pump NP-302	3	2.00	6.00
Air Compressor NP-217	3	6.00	<u>18.00</u>
			95.80
February 26, 1982			
Utility Vehicle P2-24	8 miles	.35	2.80
Dump Truck T2-47	2	23.00	46.00
2" Pump NP-302	2	2.00	4.00
Air Compressor NP-217	2	6.00	<u>12.00</u>
			64.80
March 2, 1982			
Utility Vehicle P2-24	8 miles	.35	2.80
Dump Truck T2-47	2	23.00	46.00
2" Pump NP-302	2	2.00	4.00
Air Compressor NP-217	2	6.00	<u>12.00</u>
			64.80
March 3, 1982			
Utility Vehicle P2-24	8 miles	.35	2.80
Crew Cab T3-46	1	12.00	12.00
2" Pump NP-302	1	2.00	2.00
Air Compressor NP-217	1	6.00	<u>6.00</u>
			22.80
		Equipment Costs	\$349.00

2027 N. Glorstone

Rosh Jenkins  
Morris Gas and Oil Company  
March 9, 1982

PERSONNEL

<u>Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Charge</u>
February 9, 1982			
Randy Lyman	2	15.27	30.54
Steve Short	2	12.74	25.48
J. D. Slaughter	2	12.13	24.26
			<u>80.28</u>
February 24, 1982			
Randy Lyman	4	15.27	61.08
Gene Pabst	4	15.27	61.08
Steve Short	4	12.74	50.96
			<u>173.12</u>
February 26, 1982			
Randy Lyman	3	15.27	45.81
Gene Pabst	3	15.27	45.81
Steve Short	3	12.74	38.22
			<u>129.84</u>
March 2, 1982			
Randy Lyman	3	15.27	45.81
Gene Pabst	3	15.27	45.81
Steve Short	3	12.74	38.22
			<u>129.84</u>
March 3, 1982			
Randy Lyman	2	15.27	30.54
Gene Pabst	2	15.27	30.54
Steve Short	2	12.74	25.48
			<u>86.56</u>
		Total Personnel -	\$599.64

Amoco  
CK NO 69537  
RD. MAY 3, 82

March 9, 1982

Mr. John D. DeWeese, District Manager  
Standard Oil Company  
725 East Edgewood Street  
Springfield, Missouri 65807

Re: I-44 Standard Service  
2623 N. Glenstone

Dear Mr. DeWeese:

This letter and enclosures will advise you that the following expenses were incurred in the detection, segregation, and correction of gasoline entering the Springfield Sanitary Sewer System. The expenses are hereby certified and forwarded to Standard Oil Company for payment, per Springfield City Code, Chapter 30-18. Enclosed you will also find a detailed explanation of personnel and equipment costs. Payment should be made to the Director of Finance, City of Springfield and should be sent to:

Mr. Robert R. Schaefer  
Superintendent of Sanitary Services  
Room 210, City Hall  
830 Boonville  
Springfield, Missouri 65802

The totals from the detailed enclosures are as follows:

Personnel	\$1,582.15
Equipment	<u>276.40</u>
	\$1,858.55

If we can be of any assistance or answer any questions, please do not hesitate to call (417) 864-1924.

Yours truly,

Henry M. Cole  
Sanitary Engineer

HMC:js

cc: Robert R. Schaefer, P.E., Superintendent of Sanitary Services  
Fred Fantauzzi, Director of Finance  
File

2027 N. Glenstone

Mr. John D. DeWeese, District Manager  
 Standard Oil Company  
 March 9, 1982

PERSONNEL COSTS

<u>Employee</u>	<u>Hours</u>	<u>Overtime Factor</u>	<u>Rate</u>	<u>Charge</u>
February 4, 1982				
Steve Short	5.5	1.5	12.74	105.11
Omer Boyce	1.0	1.5	10.94	16.41
Billy McReynolds	1.0	1.5	8.55	12.83
Waldo Hawkins	2.0		8.29	16.58
Terry Barnett	2.0		6.38	12.76
				<u>163.69</u>
February 5, 1982				
Robert Corson	1.5		15.27	22.91
Randy Lyman	6.0		15.27	91.62
Steve Short	3.5		12.74	44.59
Steve Short	1.5	1.5	12.74	28.67
				<u>187.79</u>
February 6, 1982				
Randy Lyman	9.5		15.27	145.07
Steve Short	8.0	1.5	12.74	152.88
				<u>297.95</u>
February 7, 1982				
Randy Lyman	7.5		15.27	114.53
Steve Short	7.5	1.5	12.74	143.33
				<u>257.86</u>
February 8, 1982				
Randy Lyman	10		15.27	152.70
Steve Short	8		12.74	101.92
Steve Short	2	1.5	12.74	38.22
				<u>292.84</u>
February 9, 1982				
Randy Lyman	6		15.27	91.62
Steve Short	6		12.74	76.44
				<u>168.06</u>

2027 N- Glasstone

Mr. John D. DeWeese, District Manager  
Standard Oil Company  
March 9, 1982

PERSONNEL COSTS (Con't)

<u>Employee</u>	<u>Hours</u>	<u>Overtime Factor</u>	<u>Rate</u>	<u>Charge</u>
Randy Lyman	4		15.27	61.08
Steve Short	6		12.74	<u>76.44</u>
				137.52

February 11, 1982

Steve Short	6		12.74	<u>76.44</u>
				76.44

Total Personnel \$1,582.15

Mr. John D. DeWeese, District Manager  
 Standard Oil Company  
 March 9, 1982

<u>Number</u>	<u>Hours</u>	<u>Rate</u>	<u>Charge</u>
February 4, 1982			
Sewer Flusher NP-106 + T3-48	3	30.50	<u>91.50</u> 91.50
February 5, 1982			
Utility Vehicle P2-15	22 miles	.35	<u>7.70</u> 7.70
February 6, 1982			
Utility Vehicle P2-15	22 miles	.35	7.70
Crew Cab T3-46	4	12.00	48.00
Air Compressor + Pump NP-343	4	2.00	<u>8.00</u> 63.70
February 7, 1982			
Utility Vehicle P2-15	22 miles	.35	7.70
Dump Truck T2-47	3	23.00	69.00
Air Compressor + Pump NP-343	3	2.00	<u>6.00</u> 82.70
February 8, 1982			
Utility Vehicle P2-15	22 miles	.35	<u>7.70</u> 7.70
February 9, 1982			
Utility Vehicle P2-15	22 miles	.35	<u>7.70</u> 7.70
February 10, 1982			
Utility Vehicle P2-15	22 miles	.35	<u>7.70</u> 7.70
February 11, 1982			
Utility Vehicle P2-24	22 miles	.35	<u>7.70</u> 7.70

Equipment Costs \$276.40